

# Notice of Allowability

Application No.

09/689,548

Examiner

Brian R. Gordon

Applicant(s)

JOHNSON ET AL.

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1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6-24-04.
2. ☒ The allowed claim(s) is/are 1-10, 14 and 59-90.
3. ☒ The drawings filed on 1-9-02 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Louie on August 24, 2004.

The application has been amended as follows:

In the claims:

Amend claim 78 as follows:

78. (Currently Amended) A hybrid valve system to enable transfer of a liquid sample slug from a reservoir to a test site on a substrate surface comprising:

an aspiration actuator;

a dispensing actuator; and

a digitally regulated hydraulic pressure system in fluid communication with the dispensing actuator for precision operation thereof;

a valve assembly movable between an aspiration condition and a dispensing condition;

~~an aspiration actuator;~~

~~a dispensing actuator; and~~

a manifold providing a fluid aspiration conduit having a first aspiration port for fluid communication with the aspiration actuator, and a second aspiration port in

selective fluid communication with the valve assembly to selectively aspirate the liquid sample slug from the reservoir into a discrete sample path, a primary passage portion thereof that extends through at least a portion of said manifold for fluid communication with said valve assembly, when the valve assembly is in the aspiration condition, said manifold device further providing a fluid dispensing conduit having a first dispensing port for fluid communication with the dispensing actuator, and a second dispensing port in selective fluid communication with the valve assembly to selectively dispense at least one droplet of the liquid sample slug from the sample path when the valve assembly is in the dispensing condition,

wherein, in the aspiration condition, said sample path is out of fluid communication with the dispensing actuator and, in the dispensing condition, said sample path is out of fluid communication with the aspiration actuator.

***Allowable Subject Matter***

2. Claims 1-10, 14, 59-90 are allowed.
3. The following is an examiner's statement of reasons for allowance: The prior art of record does not teach nor fairly suggest a method using or the device of the structure as claimed: A hydraulic hybrid valve system to enable transfer of a liquid sample slug from a reservoir to a test site on a substrate surface comprising: a valve assembly movable between an aspiration condition and a dispensing condition; a communication structure having a dispensing orifice; an aspiration actuator; a dispensing actuator; and a distribution manifold device providing a ' liquid aspiration conduit containing a driving

liquid and having a first aspiration port for fluid liquid communication with the aspiration actuator, and a second aspiration port in selective liquid communication with the valve assembly to selectively aspirate a liquid sample slug from the reservoir through said dispensing orifice of said fluid communication structure defining a discrete sample path containing said driving liquid and extending from the dispensing orifice and through at least a portion of said manifold device for liquid communication with said valve assembly, when the valve assembly is in the aspiration condition, said manifold device further providing a liquid dispensing conduit containing a driving liquid and having a first dispensing port for liquid communication with the dispensing actuator, and a second dispensing port in selective ' liquid communication with the valve assembly to selectively dispense at least one droplet of the liquid sample slug from said dispensing orifice of said communication structure when the valve assembly is in the dispensing condition, wherein, in the aspiration condition, said sample path is out of liquid communication with the dispensing actuator and, in the dispensing condition, said sample path is out of liquid communication with the aspiration actuator. See also previous office action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

brg

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700